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NELSONIA NEOTOMODON, A NEW GENUS AND SPECIES OF MURINE RODENT FROM MEXICO.

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The collection of mammals made in Mexico by Mr. E. W. Nelson still contains many novelties. Recently, in looking at the skull of a large White-footed Mouse from the mountains of Zacatecas, supposed to be a typical *Peromyscus*, I was startled to find that it had the flat-topped prismatic teeth of a Wood Rat, *Neotoma*. Closer examination of the dentition showed that while the 1st and 2d upper and 1st lower molars agree essentially with those of *Neotoma*, the 3d upper and 2d and 3d lower differ so materially that it is necessary to erect a new genus for the animal's reception. The skull also is peculiar and unlike either *Neotoma* or *Peromyscus*. The most important difference is in the antorbital slit, which does not notch the upper surface of the maxillary root of the zygoma. Another character is the production of the inferior angle of the antorbital slit to form a distinct process. The tail is large and blunt, much as in *Neotoma*—not tapering to a slender point as in *Peromyscus*.

The new genus may be defined as follows:

Nelsonia gen. nov.

Type.—*Nelsonia neotomodon* sp. nov., from Plateado, Zacatecas, Mexico.

Diagnosis.—Cranial characters: Skull in general resembling that of a large *Peromyscus* but flatter; zygomata heavier, less depressed, and more spreading anteriorly; antorbital slits relatively narrow and only faintly notching upper surface of maxillary root of zygoma; inferior angle of antorbital slit thickened and protruding forward and outward as a distinct process; audital bullæ sub-conical as in *Peromyscus* and *Hodomys*,

not bullate as in *Neotoma* and *Xenomys;* brain case depressed as in *Peromyscus,* not elevated as in *Neotoma, Xenomys,* and *Hodomys;* incisive foramina large and open, broader anteriorly than in *Neotoma* or *Peromyscus;* coronoid process of mandible small, hardly larger than in *Peromyscus.*

Dental characters (Fig. 14).—Teeth rooted, large, massive, and prismatic, with flat crowns presenting deep reëntrant angles of enamel (enamel of equal thickness throughout) as in *Neotoma* and *Xenomys*—totally different from the small tubercular teeth (with enamel of unequal thickness) of *Peromyscus.* Crowns of 1st and 2d upper and 1st lower molars with enamel pattern essentially as in *Neotoma, Hodomys,* and *Xenomys.* Crowns of 3d upper and 2d and 3d lower molars with enamel pattern unlike that of any known genus; 3d upper molar with a single very deep and narrow reëntrant angle on outer side, which pushes almost completely across the tooth, dividing the crown into two subtriangular lobes, the posterior of which is the larger; 2d lower molar with one reëntrant angle on each side, the inner deeper than, and passing anterior to, the outer, dividing the crown into two transverse loops the posterior of which is sometimes deeply notched on the inner side by a secondary reëntrant angle; 3d lower molar with a single and rather open reëntrant angle on inner side, reaching only half way across tooth, and a slight projection (without distinct reëntrant angle) on outer side.

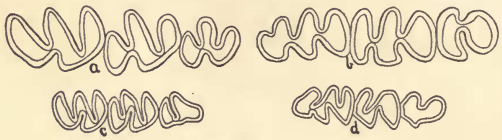

Fig. 14.—*Molar teeth of Nelsonia neotomodon and Neotoma desertorum.* × 3.

a (upper) *b* (lower) molars of *Neotoma desertorum.*
c (upper) *d* (lower) molars of *Nelsonia neotomodon.*

External characters.—Size (of only known species) equalling largest species of *Peromyscus;* tail large and blunt as in *Neotoma,* and well haired, with terminal pencil larger than usual in *Peromyscus;* feet large, relatively as in *Neotoma*—decidedly larger than in *Peromyscus.*

Nelsonia neotomodon sp. nov.

Type from mountains near Plateado, Zacatecas, Mexico. (Altitude about 2500 meters or 8200 feet.) No. 90891, ♂ ad. U. S. Nat. Mus., Biological Survey Coll. Collected Sept. 3, 1897, by E. W. Nelson and E. A. Goldman. Original No. 11625.

General characters.—Size, coloration, and general appearance similar to the larger species of *Peromyscus* (as *P. californicus*), but whiskers larger and coarser, tail larger and blunter, and feet larger; ears large and nearly naked; tail well haired, white-tipped, and with a distinct terminal pencil.

Color.—Upper parts grayish brown, conspicuously lined with black on rump and posterior half of back, and suffused along the sides with pale dull fulvous, which becomes intensified inferiorly so as to form a fairly distinct band between the gray of the back and white of the belly, reaching all the way from cheeks to thighs; under parts white, the hairs

plumbeous at base; fore and hind feet white; outer side of hind legs dusky to ankles; eyes surrounded by a narrow ring of black; white of upper lip reaching up on sides of nose half way to eye; tail sharply bicolor; dusky above, white below, and at tip all round.

Cranial and dental characters.—The cranial and dental characters have been so fully given in the generic diagnosis and are so well shown in the accompanying drawings that it will be unnecessary to describe them further unless a second species is discovered.

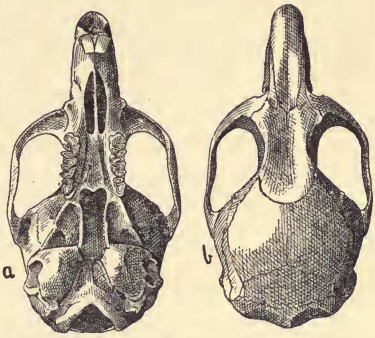

FIG. 15.—Skull of *Nelsonia neotomodon*. × 1½.

Measurements. — Type specimen, ♂ ad.: total length, 247; tail vertebræ, 121; hind foot, 29. Average of 6 specimens from type locality: total length, 244; tail vertebræ, 121; hind foot, 29.

Geographic distribution. — Specimens of this remarkable animal were collected by Mr. Nelson in the higher parts of the Sierra Madre in the western corner of the State of Zacatecas, and about 100 miles farther south in the same range, near Bolaños, Jalisco. Another series was obtained in a detached range, east of the Sierra Madre, near Plateado, Zacatecas. Mr. Nelson informs me that the animals were usually found about ledges or other rocky places in the pine forest, at an altitude of 8,000 feet or upwards. Near Plateado specimens were secured along the upper edge of the oak belt, where the oaks mix with the lower edge of the pines. None were found at lower altitudes.